

REMARKS

The present invention is a method of making a device cover. The method includes, with respect to the disclosed embodiments, positioning the first insulating foil 38 over a first surface of an electroluminescent foil 36 to form a preliminary cover member; forming the preliminary cover into a preselected shape; punching first holes 20 through the preliminary cover for passage of control keys therethrough and a second hole 40 through the first insulating foil to expose a surface of the electroluminescent foil; placing the preliminary cover into a mold of the preselected shape, the mold having bosses corresponding with the first holes and to the second hole. See paragraph [0018] where it is taught "an opening 40 passes through rigid support base 30 and second insulating foil 32, exposing a portion of the surface of the electroluminescent foil" and further, paragraph [0020] where it is taught "the preliminary cover members placed in the mold having bosses which correspond with holes 14-22 and 40 to provide corresponding holes in rigid support base 30". Finally, plastic is injected into the mold and into contact with the preliminary cover member to form the device cover. The bosses provide holes through the plastic corresponding to the first and second holes so that after the mold is opened, the first holes extend through the device cover and the second hole extends to the surface of the electroluminescent foil.

The title of the invention has been amended to "Method of Making Illuminated Covers".

Claims 25-33 stand rejected under 35 U.S.C. §103 over United States Patent 5,780,965 in view of EP 0 932 288 A1. The Examiner reasons as follows:

Claims 25-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cass et al., USP 5,780,965 in view of EP 0932 288 A1 (both of record).

The cited primary reference teaches the basic claimed process of forming a device cover including a composite or laminate foil having multiple layers, further including an electroluminescent. The detailed method steps include providing an electroluminescent display having a transparent layer (16), also at least one translucent layer (18), and an electroluminescent planar layer (22). The transparent layer (16) may be preformed and provided with at least one aperture (17c). The translucent layer is provided with window sections and may include graphics or decorative printings. Note also that the plastic materials used to form the transparent and translucent layers are well known in the molding art to possess electrically insulative features. The composite or laminate is in sheet form and may be further shaped into a three-dimensional configuration using conventional shaping or molding means. When shaped, it is placed within a cavity of an injection mold, and a resin forming substrate is provided in contact with the shaped sheet to form an integrally attached substrate. See col. 3, lines 30-50, 59-62; col. 4, lines 5-18, 30-55, and col. 5, lines 5-25.

The cited primary reference does not teach providing a mold with bosses corresponding to the openings provided in the composite or laminate foil.

The cited secondary reference teaches as conventional the molding of a device cover using a pre-shaped composite foil having openings therein, wherein the openings are used to position pins therein prior to molding of the substrate, to prevent resin from closing the openings. The detailed method steps include providing a composite foil-decorating film having multiple layers. The composite foil-film is brought into contact with a molding surface and shaped within the molding cavity. The mold is provided with slide cores that are pushed through the film into the mold cavity into contact with the upper mold half, wherein the step of pushing punches holes within the film. Resin is molded into the mold cavity in integral contact with the composite foil-film. During molding, the slide cores stay in contact with the mold have and serve as mold bosses to keep the openings open until the resin is cured. Please see page 8, paragraphs 0054-0058.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a mold with bosses

corresponding to the openings within the composite film, in view of the added reference, for keeping the openings open until the resin, being molded in integral contact with the composite film, is cured.

These grounds of rejection are traversed for the following reasons.

Even if the proposed combination of references were made as suggested by the Examiner, the claimed invention would not be achieved. Moreover, it is submitted that the proposed combination is based upon impermissible hindsight.

United States Patent 5,780,965 discloses an electroluminescent display which is backlighted with an electroluminescent lamp 26 as illustrated in Fig. 3. Aside from the Examiner's observation that an opening 17c is provided, it is submitted that Cass et al is not relevant to the invention. In the first place, Cass et al's lamination, as depicted in Fig. 3, would not be considered to meet the limitations of claim 25 of "positioning a first insulating foil over a first surface of an electroluminescent foil to form a preliminary cover member" and "forming the preliminary cover member into a preselected shape". Moreover, as the Examiner recognizes, Cass et al do not teach the claimed bosses.

The EP reference, while disclosing a foil decorating film, does not disclose that the film is electroluminescent. See paragraph [0029] where reference to an LED is made for illumination inside the cellular phone top cover.

Claim 25 further recites "punching first holes through the preliminary cover member for passage of control keys therethrough and a second hole through the first insulating foil to expose a surface of the electroluminescent foil; placing the preliminary cover member into a mold of the preselected shape, the mold having bosses corresponding with the first holes and to the second hole; and injecting

plastic into the mold and into contact with the preliminary cover member to form the device cover, the bosses providing holes through the plastic corresponding with the first and second holes so that when the mold is opened, the first holes extend through the device cover and the second holes extend to the surface of the electroluminescent foil". This subject matter has no counterpart in the EP reference.

Accordingly, it is submitted that claim 25 defines patentable subject matter over the proposed combination of references in that the references together do not teach each of the steps set forth in claim 25 and furthermore, there is no basis why a person of ordinary skill in the art would be motivated to combine the references to achieve a device, including an electroluminescent foil as recited in the claims in combination with first and second holes. Moreover, the second hole is not taught. There is no basis in the record why a person of ordinary skill in the art would be motivated to make the proposed combination given the fundamental differences between the three-dimensional electroluminescent display of Cass et al and the telephone of the EP reference.

The dependent claims define more specific aspects of the present invention which are not rendered obvious by the proposed combination.


In view of the foregoing amendments and remarks, it is submitted that claims 26-33 are in condition for allowance. Accordingly, early allowance thereof is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 C.F.R. §1.136. Please charge any shortage in fees due in connection with the

filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (0173.40336X00) and please credit any excess fees to such Deposit Account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

A handwritten signature in black ink, appearing to read "G. Montone", is written over a horizontal line.

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Attachments

DES/GEM:dlh